Description of June 17, 2003, Presentation Maps

Wind Sites

This map was created by overlaying wind monitor locations that were made available by ADEQ by latitude/longitude with general topography and political boundaries. Significant lakes and cities are also shown, as well as general urban, forest, and Indian reservation landuse.

Data Sources: University of Arizona, SRP, Maricopa County, ADEQ, USGS, ALRIS

Ozone Sites

This map was created by overlaying ozone monitor locations that were made available by ADEQ by latitude/longitude with general topography and political boundaries. Significant lakes and cities are also shown, as well as general urban, forest, and Indian reservation landuse.

Data Sources: University of Arizona, SRP, Maricopa County, ADEQ, USGS, ALRIS

Receptor Area Study Zones

This map was created by overlaying receptor area study zones that were made available by Gary Neuroth, Air Pollution Evaluations & Solutions with general topography and political boundaries. Significant lakes and cities are also shown.

Data Source: ADEQ, USGS, ALRIS, Neuroth

Receptor sectors with and without 80/85 ppb boundaries

This series of maps was created by overlaying receptor area boundaries and 80 ppb and 85 ppb boundaries that were made available by Gary Neuroth, Air Pollution Evaluations & Solutions, with general topography and political boundaries. Significant lakes and cities are also shown.

Data Source: ADEQ, USGS, ALRIS, Neuroth

80 and 85 ppb Receptor Areas

This map was created by overlaying 80 ppb and 85 ppb receptor area boundaries that were made available by Gary Neuroth, Air Pollution Evaluations & Solutions, with general topography and political boundaries. Significant lakes and cities are also shown, as well as general urban, forest, and Indian reservation landuse.

Data Source: ADEQ, USGS, ALRIS, Neuroth

Current and Future Residential land use

This map was created using data obtained from the City of Payson, Yavapai County, and MAG.

The Payson zoning data was manually digitized from a hardcopy zoning map, using USGS township, range, and section lines as a guideline. Only the residential zones are shown on this map, in red.

Yavapai County provided its zoning data in a digital format, which was then queried to extract the residential zones, which are shown in red.

Two datasets from MAG were used for this map. The first was land use for the year 2000, and residential land use was extracted and is shown in red. Second, a dataset that showed platted subdivisions was used. Platted subdivisions are shown in blue, indicating development that will take place in the near future, or perhaps is already taking place. Platted subdivisions have been through the planning process and are approved to be built.

Data Sources: MAG 2000 Landuse digital GIS file, Yavapai County Zoning digital GIS file, Payson Zoning hardcopy map

Current and Future Land use with Pinal Traffic Projections

Two datasets from MAG were used for this map. The first was land use for the year 2000, and residential land use was extracted and is shown in red. Second, a dataset that showed platted subdivisions was used. Platted subdivisions are shown in blue, indicating development that will take place in the near future, or perhaps is already taking place. Platted subdivisions have been through the planning process and are approved to be built.

Data from the Pinal County Transportation Plan 2000 Update was also used. The map depicts change for Annual Average Daily Traffic Counts for Pinal County from 2005-2020.

Data sources: Lima and Associates digital GIS file, MAG digital GIS files

Current Residential land use with Emissions:

This map shows the Anthropogenic VOC emissions that were produced by the SMOKE model overlayed by current residential landuse. The SMOKE dataset was provided by the ASU Department of Mechanical and Aerospace Engineering and is displayed by 6km cell output, which is the resolution of the model.

Data Source: MAG 2000 Landuse digital GIS file, ASU Department of Mechanical and Aerospace Engineering (Ascii file)

Current Residential land use with Source Area:
This map was created by overlaying a source area boundary that was made available by Gary Neuroth, Air Pollution Evaluations & Solutions, with current and future landuse.

Data Sources: MAG 2000 Landuse digital GIS file, ALRIS, Neuroth

Current Residential land use with Wind Arrows:
This map was created by overlaying wind direction arrows that were made available by Gary Neuroth, Air Pollution Evaluations & Solutions, with current and future landuse.

Data Sources: MAG 2000 Landuse digital GIS file, ALRIS, Neuroth

Source with Transportation Modeling Area:
This map was created by overlaying a source area boundary that was made available by Gary Neuroth, Air Pollution Evaluations & Solutions, with the Transportation Modeling Area. The map is shown with general topography and political boundaries. The transportation modeling area was scanned and georeferenced from "Preliminary Draft, Initial Analysis for an Eight-Hour Ozone Boundary Option for the Maricopa County Nonattainment Area," May 2003, Maricopa Association of Governments.

Data Sources: Neuroth, MAG

Source Area with Area A and One-Hour Nonattainment Areas
This map was created by overlaying a source area boundary that was made available by Gary Neuroth, Air Pollution Evaluations & Solutions, with Phoenix Area A and the one hour nonattainment boundaries which were provided by ADEQ. The map is shown with general topography and political boundaries.

Data Sources: Neuroth, ADEQ

80 and 85 Receptor areas combined with Source area:
The 80 ppb receptor area was combined with the source area and the 85 ppb receptor area was combined with the source area to create this map. The map shows the boundaries for the 8 hour ozone nonattainment options for 80 ppb and 85 ppb. The map is shown with general topography and political boundaries.

Data Sources: *ADEQ, USGS, ALRIS, Neuroth*

80 area aggregated to township
The nonattainment boundary line was used to cut out the township data within it. Townships that crossed the boundary were clipped. The newly calculated area

of each township in the cut out layer was divided by the original area of the township to get the percentage of each that fell within the boundary. These percentages were linked back to the original townships by their ID numbers. Townships were interactively selected for display in the map based on having at least 50% of their area within the nonattainment boundary.

Data Sources: *ADEQ, USGS, ALRIS, Neuroth*

85 area aggregated to township;

The nonattainment boundary line was used to cut out the township data within it. Townships that crossed the boundary were clipped. The newly calculated area of each township in the cut out layer was divided by the original area of the township to get the percentage of each that fell within the boundary. These percentages were linked back to the original townships by their ID numbers. Townships were interactively selected for display in the map based on having at least 50% of their area within the nonattainment boundary.

Data Sources: *ADEQ, USGS, ALRIS, Neuroth*